

ABSTRACT OF THE DISCLOSURE

Methods for isothermal exponential amplification of a target polynucleotide are disclosed. The methods employ two transcription modules, the first module providing linear amplification resulting in RNA transcripts, and a second module providing for further (generally cyclical) amplification resulting in more RNA transcripts. In one aspect, the amplification of the first module is composite primer based. In a second aspect, the amplification of the first module is based on target switching to generate a primer extension product comprising a promoter sequence. In all aspects, the RNA transcripts of the first transcription module are subjected to further amplification by creating an intermediate product comprising a double stranded promoter region from which transcription can occur. The invention further provides compositions and kits for practicing said methods, as well as methods which use the amplification results.